

## The Role of Computer-Assisted Language Learning (CALL) in Promoting Learner Autonomy

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### Abstract

*Problem Statement:* Teaching a language with the help of computers and the Internet has attracted the attention of many practitioners and researchers in the last 20 years, so the number of studies that investigate whether computers and the Internet promote language learning continues to increase. These studies have focused on exploring the beliefs and attitudes of learners and teachers towards computers and the Internet or on inquiring whether computers and the Internet increase the achievement levels of learners or enhance students' awareness of other cultures. Despite the widespread use of computers and the Internet in educational settings, a small number of research studies have investigated the role of Computer-Assisted Language Learning (CALL) in promoting learner autonomy. This study will contribute to the literature on the ways that CALL environments foster learner autonomy.

*Purpose:* The aim of this study is to utilize language learning environments equipped with technology to develop learner autonomy. There are four behavioural indicators of autonomy: using language learning strategies; a high motivation level to learn the English language; taking responsibility for one's own learning; and continued English language study outside the classroom.

*Method:* Forty-eight intermediate-level students at a private university in Ankara, Turkey participated in this study. The students were divided into two groups: the Strategy Training Group (STG) and the Non-Strategy Training Group (NSTG). The students in the STG received a five-week language learning strategy training through CALL, while the participants

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in the NSTG followed the university's regular curriculum. Data were collected by means of questionnaires, semi-structured face-to-face interviews, classroom observations, e-learning diaries, and the five-week language learning strategy training through CALL.

*Findings and Results:* The results of the study indicate that the students in the STG displayed improvement in their usage of language learning strategies, had higher motivation, were more willing to take responsibility for their own learning, and were engaged in extra-curricular study by means of CALL compared to the students in the NSTG.

*Conclusions and Recommendations:* Becoming autonomous learners necessitates readiness on the part of the students. Therefore, it is important for instructors to know whether their students are ready to develop autonomy. Autonomous learning differs from conventional foreign language education in the sense that the primary focus of autonomous learning is on the learners' individual awareness of the learning process. Therefore, it would be beneficial for curriculum units in language teaching institutions to revise course objectives and to design classroom activities that promote learner autonomy.

*Keywords:* CALL, learner autonomy, learning strategies, motivation, taking responsibility, extra-curricular study, language learning

The past few decades have witnessed a shift from a behaviourist mode of pedagogy to a constructivist mode of education. According to constructivist theorists, who emphasize learner-centered instruction, meaning making occurs in the individual and results from his or her experience and social interaction with others (Dawley, 2007, p. 3). Social constructivists believe that learning, especially language learning, is a social process and that it does not take place only within an individual. They also believe that it is not a passive development of behaviour that external forces determine. Instead, they propose that meaningful learning occurs when individuals are engaged in social activities, that is, when the learners interact with one another.

In this light, some researchers suggested that available information and communication technology might have an impact on the lives of educators and students, especially on the growth of the students' understanding and the development of their skills. Computer-Assisted Language Learning (CALL), which is "the search for and study of applications of the computer in language teaching and learning" (Levy, 1997, p. 1), has been a significant development in language teaching and learning. Parallel to the philosophy of social constructivism, this information and communication technology encourages learners to share their learning experiences and to build upon their previous knowledge, and therefore provides an appropriate framework for teachers to use to understand how learners become independent in learning and how they gain responsibility for their own learning, which is also referred to as learner autonomy (Hedge, 2000, p. 82). Shield, Weininger, and Davies (1999) illustrate the development of learner autonomy within constructivist

principles by referring to the Multi-User Domain Object Oriented (MOO) system of Computer-Mediated Communication (CMC) technology, as in the following:

Like other CMC environments, MOO allows learners to login at times convenient to themselves. Such "24/7" technologies are excellent vehicles to promote autonomous learning strategies since they offer learners the opportunity to connect at any time, whether or not their tutor is available... MOO also allows learners to work individually or collaboratively in customizable virtual workspaces which exist even when the occupiers are not online. With all these points in mind, then, we have developed learning activities to take advantage of the features of MOO which promote constructivist principles and autonomous learning strategies. (p. 4)

In literature autonomy has been defined in a variety of ways. For the purposes of this study, we define learner autonomy as acquiring learning strategies for language education and the ways of using these strategies. These strategies should lead learners to use the target language for learning and communication as well as encourage them to demonstrate their capacity to take control of their own learning. Many researchers have associated the notion of *autonomous learner* with *good learner*. To illustrate, Hedge (2000) views good learners as confident in their ability to learn, self-reliant, motivated, enthusiastic, aware of why they want to learn, unafraid of making mistakes, good risk takers, good guessers, and probably positive in their attitudes toward the target language and culture. Hedge also states that such students are willing to assume a certain responsibility for their own learning (p. 82).

Expecting learners to develop autonomy does not seem feasible in a traditional classroom where the teacher dominates the learning process so that the learners have almost no incentive to take responsibility for their own learning. Autonomy is both independence and interdependence. Independence is taking responsibility for one's own learning, setting goals, and evaluating one's own progress in the learning process. Learners show their independence within a specific sociocultural context where independence, through socialization and interaction with teachers and peers, impacts the levels of control they exercise and develop (Benson, 2001). The increasing advances in technology in education, such as computers and the Internet, have offered an appropriate environment for learning autonomy. Shetzer and Warschauer (2000, cited in Blin, 2004) connect the concepts of learner autonomy and technology in this way:

Autonomous learners know how to formulate research questions, and devise plans to answer them. They answer their own questions through accessing learning tools and resources on-line and off-line. Moreover, autonomous learners are able to take charge of their own learning by working on individual and collaborative projects that result in communication opportunities in the form of presentations, Web sites, and traditional publications accessible to local and global audiences. Language professionals who have access to an Internet computer classroom are in a position to teach students valuable lifelong learning skills and strategies for becoming autonomous learners. (p. 379)

The activities described by Shetzer and Warschauer demand that learners work cooperatively and collaboratively not only with the teacher but also with each other if they wish to work autonomously. Computers, the Internet, and their related tools such as e-mails, discussion forums, and online chat environments, provide language learners with sociable, collaborative, and authentic learning opportunities where they can develop autonomy and take increasing responsibility for their own learning.

Computer Mediated Communication (CMC), which is the transmission and reception of messages via computer networks, has evolved from the sending and receiving of text messages to the use of multimedia elements in the process of inter-human interaction (Khine, Yeap, & Lok, 2003, pp. 115-116). CMC, which is also known as Web 2.0, characterizes the types of technology in the World Wide Web and web design that aim to enhance creativity, information sharing, and, most notably, collaboration among users. CMC can be divided into two categories contingent with the timing of the communication. The first type of communication is synchronous communication during which the sender and the recipient engage in direct communication contemporaneously. Bowles (2004) asserts that the most common form of synchronous electronic communication is real time, two-way, text-based online chat, which is commonly used in CALL. The other type of CMC is asynchronous communication, which does not require all of the participants who are involved in the communication to be present and available contemporaneously. The most common asynchronous communication tools are electronic mail, blogs, and message boards.

Computer and Internet technology seems to encourage learner autonomy by allowing students to choose the time, place, and circumstances that are conducive to their learning. Additionally, computers and the Internet can raise learners' levels of motivation in language education by offering topics that are of interest to the learners and by introducing a diversity of study methods inside and outside the classroom. Moreover, the Internet can contribute to the development of learners' language learning strategies by exposing learners to a digital social environment with many native speakers to whom the students do not have access in their local community. Finally, students who learn with computers can work individually at a comfortable pace, so they are more likely to take personal responsibility for learning both inside and outside the classroom.

A variety of studies have been conducted to ascertain whether the academic application of computers and the Internet promotes language learning. Most of these studies have focused on four overarching topics: gender-related differences in attitudes towards the use of computers (e.g., Birol et al., 2008); the connection between conference of meaning in synchronous communication environments and second language vocabulary acquisition (e.g., Şahin, 2009); learners or teachers' opinions and attitudes towards the use of computers and the Internet (e.g., Aykaç, 2005); and whether the use of computers and the Internet raises learners' achievement levels or develops a profound understanding of foreign cultural attitudes and values in students.

Research on learner autonomy in CALL environments has focused on only the minor aspects of learner autonomy, such as student motivation in CALL

environments or extra-curricular study via CALL. However, this study focuses on the importance of the four components of learner autonomy: acquiring language learning strategies, motivation in language learning; taking responsibility for one's own learning; and extra-curricular study in CALL environments.

In this light, this research study sought to answer the following three research questions:

1. To what extent does the application of CALL in the classroom increase learners' autonomy in language education?
  - 1a. To what extent do learners increase their application of language learning strategies through CALL?
  - 1b. To what extent does learners' motivation increase through CALL?
  - 1c. To what extent do learners accept responsibility for learning when instructed in a CALL environment?
  - 1d. To what extent do learners perform extra-curricular activities in addition to class tasks when instructed in a CALL environment?
2. Is there a significant difference between the groups of learners who receive web-based instruction and those who do not receive web-based instruction with regard to their language learning strategy use?
3. How does the application of computer-mediated language learning affect learners' perceptions of English Language Learning by means of computers and the Internet?

## Method

### *Research Design*

We collected data with a combination of qualitative and quantitative instruments as a form of 'mixed' methodology to present reliable research information. While using the mixed methodology, the researcher amalgamates or combines quantitative and qualitative research techniques, methods, and approaches into a single study (Fraenkel & Wallen, 2005). Brown (1995) comments on the importance of combining qualitative and quantitative methods, stating that both types of data can yield valuable information in any given evaluation, so disregarding either type of information would be self-defeating (p. 232). Basing a study on more than one type of data collection instrument is also important for triangulation. Richards (2001) emphasizes that applying a triangular approach (i.e., collecting information from two or more sources) is advisable, because any one source of information is likely to be incomplete or partial (p. 59).

The mixed methodology approach helped us to illustrate learner autonomy development in language learning strategy use, motivation for learning, the willingness to take responsibility for one's own learning, and participation in extra-curricular study with the assistance of CALL. As part of the research design, one of the classes, the Strategy Training Group (STG), was given a five-week language learning strategy training course through CALL. The other class, the Non-Strategy Training Group (NSTG), did not receive any training. The differences between the STG and the NSTG regarding their learner autonomy development were explored.

### *Participants*

The study was conducted at a private university in Ankara, Turkey. This university grants a scholarship to some students, and loans a laptop to all enrolled students. Forty-eight students enrolled in the English Preparatory program participated in the study, and their ages varied from 17 to 20 years. All of the participants were at the intermediate level of English according to the university's placement test. There were 24 students in each class. One of the researchers was the instructor of the STG for the entire school semester, which lasted for 15 weeks. The NSTG had two instructors for the whole semester, and they were similar to the STG's teacher-researcher in terms of age, educational background, and teaching experience.

### *Data Collection Instruments*

Five types of data collection tools were used in this study: a questionnaire, a semi-structured face-to-face interview, an e-learning diary, classroom observations, and language learning strategy training via web-based instruction.

*Questionnaire.* The questionnaire was the SILL version 7.0 (Oxford, 1990), a 50-item self-report survey aimed at native speakers of English who are learning a foreign language. The SILL, a Likert-type measure, examines the frequency with which respondents use strategies for language learning. It consists of six subgroups of language learning strategies: memory, cognitive, compensation, metacognitive, affective, and social strategies. The students in both the STG and the NSTG were given the SILL inquiring about their learning strategies at the beginning and at the end of the web-based language learning strategy. The SILL was accompanied by a background questionnaire inquiring about the students' age, educational background, years of studying English, and whether they had completed an extended stay in an English-speaking country.

*Interview.* To receive feedback from the participants in the STG regarding their experiences during the training period of web-based instruction, the researchers conducted semi-structured face-to-face interviews. After the administration of the pre-questionnaire, the students in the STG were given a pre-interview to gain insights into their English language skills, learning strategies, habits, reasons for learning English, general attitudes towards learning English, and their use of computers and the Internet to improve their English. These students were again interviewed at the end of the five-week language learning strategy training period of web-based instruction to discuss the experiences that they had during the training period and their general attitudes towards learning English and the use of computers for educational purposes.

*E-learning Diary.* The class forum on the website that was set up for the STG provided the students with the opportunity to communicate with each other. Each week, the students in the STG were invited to write paragraphs discussing their experiences in learning English and in using the Internet and computers to study English. They were encouraged to discuss what they enjoyed during the week, what new things they learned, and what types of problems they encountered during their English learning. The students also wrote about what activities and homework they had done on the computers and the Internet as well as their weaknesses and strengths pertinent to the topics of the week.

*Classroom Observation.* The type of observation that the teacher-researcher used in this study was participant observation (Cohen, Manion, & Morrison, 2000). The instructor of the NSTG acted as the informant, and reported her observations at the end of each week to the teacher-researcher who was the instructor of the STG. Then, the teacher-researcher interviewed the instructor of the NSTG to compare the two groups in terms of their motivation levels, their willingness to take responsibility for their own learning, their out of class learning, and their language learning strategy use.

*Language Learning Strategy Training.* Throughout the language learning strategy training, both the STG and the NSTG followed the same syllabus prepared by the curriculum unit at the university. However, CALL activities were integrated into the syllabus of the STG, while the NSTG followed the common weekly schedule prepared by the administration. The students in the STG were involved in language learning strategy training through CALL both inside and outside the classroom. During the training, the students were informed of the types of strategies, how they could be used in learning, and why they were important to language development. All of the strategies were integrated into the weekly units of the course books and into all classroom activities that required computers and the Internet.

Two weeks before the study started, a class web page on *ifast.net* was set up for the STG. On this web page, a discussion forum was created, and its main purpose was to serve as a place where the students in the STG could participate in discussions outside the classroom. A blog page attached to this web page was used as an archive for the students' weekly writing assignments. Furthermore, an online speaking class was created on Yackpack ([www.yackpack.com](http://www.yackpack.com)), and its main purpose was to create an environment for the students to continue discussing a topic when classroom time did not suffice. Additionally, a Yahoo group account was created, and all the STG students were invited to join the group. The STG students sent their writing, grammar, and vocabulary assignments to the teacher-researcher via e-mail so that she could check these assignments. Besides these, PowerPoint presentations prepared by the teacher-researcher were used during the lessons for introducing new grammar points and vocabulary items.

## Results

### *The Role of CALL in Fostering Learner Autonomy*

#### *The Development of Language Learning Strategy Use through CALL*

To see the differences between the STG's pre-test and the post-test results on the learning strategy questionnaire, we performed a paired sample t-test. Since the same group was analyzed, the paired sample t-test was appropriate. The results of this test revealed that there was a significant difference between the STG's pre-test and the post-test scores.

The descriptive analysis of the paired sample t-test indicates that for the 24 subjects, the mean post-score for Memory ( $M=3.71$ ), Cognitive ( $M=3.86$ ), Compensation ( $M=3.97$ ), Metacognitive, ( $M=3.78$ ), Affective (3.77), and Social (3.81) are significantly greater than the mean pre-score for Memory ( $M=1.75$ ), Cognitive ( $M=2.04$ ), Compensation ( $M=2.31$ ), Metacognitive, ( $M=2.27$ ), Affective (2.30), and

Social (2.25). After evaluating the mean scores of the strategies, we concluded that the mean scores of the post-test results were higher than the mean scores of the pre-test results, indicating that the students in the STG improved in their use of language learning strategies at the end of the strategy training via computers and the Internet. Table 1 below presents the pre and post-test results of the STG.

**Table 1.**  
*Statistics Demonstrating Pre and Post-Test SILL Results of STG*

| <i>Paired Samples Statistics</i> |                                     | <i>M</i> | <i>N</i> | <i>SD</i> | <i>Std. Mean</i> | <i>Error</i> |
|----------------------------------|-------------------------------------|----------|----------|-----------|------------------|--------------|
| Pair 1                           | Memory Strategies of Pre STG        | 1.7500   | 24       | .33131    | .06763           |              |
|                                  | Memory of Post STG                  | 3.7176   | 24       | .31594    | .06449           |              |
| Pair 2                           | Cognitive Strategies of Pre STG     | 2.0417   | 24       | .40893    | .08347           |              |
|                                  | Cognitive of Post STG               | 3.8690   | 24       | .25596    | .05225           |              |
| Pair 3                           | Compensation Strategies of Pre STG  | 2.3194   | 24       | .49859    | .10177           |              |
|                                  | Compensation of Post STG            | 3.9722   | 24       | .30561    | .06238           |              |
| Pair 4                           | Metacognitive Strategies of Pre STG | 2.2778   | 24       | .49798    | .10165           |              |
|                                  | Metacognitive of Post STG           | 3.7824   | 24       | .18383    | .03752           |              |
| Pair 5                           | Affective of Pre STG                | 2.3056   | 24       | .50521    | .10312           |              |
|                                  | Affective of Post STG               | 3.7778   | 24       | .26314    | .05371           |              |
| Pair 6                           | Social of Pre STG                   | 2.2569   | 24       | .47645    | .09725           |              |
|                                  | Social of Post STG                  | 3.8125   | 24       | .33446    | .06827           |              |

A mean of all the participants in the range of 3.5-5.0 in a SILL item is thought to reflect a high use of that strategy, while 2.5-3.4 reflects a medium use, and 1.0-2.4 reflects a low use (Oxford & Burry-Stock, 1995). Further analysis of the results indicated that the answers the STG students gave to all strategy categories in the pre-test remained under 2.4, signifying the students' infrequent usage of language learning strategies before the strategy training. In contrast, the answers that the same group of students gave to all of the strategy categories in the post-test were above 3.71, indicating a high language learning strategy use. Thus, by looking at the mean score of the post-test results, it could be concluded that the five-week strategy training through CALL helped to improve the participants' language learning strategies. Language learning strategy use is usually associated with learner autonomy, so it can be inferred that, with regard to language learning strategy use, the learning autonomy of the students in the STG developed significantly.

*Students' Motivation Level and CALL*

Although the students in the STG were told that their participation in this strategy training would not be rewarded with a grade, they showed increasing motivation during and after the strategy training, which, in turn, contributed to their development of autonomy. However, the NSTG instructor noted that the students in the NSTG had low levels of motivation. To exemplify, the instructor of the NSTG complained about the learners' dependence on the teacher and a lack of incentive for discovering or utilizing available opportunities for learning English outside the classroom. Furthermore, the instructor of the NSTG observed that the students in the NSTG easily lost interest in the lessons, seemed sleepy during the lessons, and were reluctant to participate in activities both inside and outside the classroom. In contrast, the students in the STG stated during the interviews that the implementation of CALL helped them to recognize classroom attendance as an opportunity to be involved in a wide variety of collaborative activities that are relevant to their personal needs and interests rather than a duty assigned by the university administration.

*Students' Acceptance of Responsibility and CALL*

Before the implementation of the strategy training, the teacher-researcher noticed that the students in the STG were highly teacher-dependent with regard to language learning. Eighteen of the 24 STG students held the opinion that what they were doing in the classroom was enough for them to improve their English. Correspondingly, the instructor of the NSTG reported that the students in her classroom were unwilling to take personal responsibility for learning. The NSTG instructor also added that the students did their homework yet had a tendency to submit their homework or assignments just before the deadline. However, during and after the strategy training, the STG students demonstrated increasing responsibility for their own learning. For instance, as the STG participants reported in the interviews, students always regarded using computers and the Internet in the classroom as a kind of reward, because using computers and the Internet was already of personal interest to them. Therefore, whenever the students were instructed to turn on their computers in the classroom, they did so without complaint. In contrast to course book-based activities in the classroom, the students worked on the computers effectively and efficiently, producing high quality work.

The NSTG instructor added that the class in general was unwilling to take personal responsibility for learning. However, the instructor conceded that seven out of 24 students constantly talked to her about their weaknesses in the English language and the ways in which they could strengthen them. Nevertheless, the instructor had given these seven students concrete guidance and advice about how to improve their learning, and they did not apply the advice. Thus, the students' dissatisfaction persisted.

*Extra-Curricular Study and CALL*

Extra-curricular study is another component of learner autonomy. Gao (2009) asserted that teachers of English are often constrained by several factors, such as official curricula, course books, teaching objectives, and time constraints due to class scheduling. Gao (2009) added that teachers tend to focus solely on the results of the

learning stage, especially exam results. Thus, learners' capacity for autonomous learning is given neither enough recognition nor enough attention (p. 6).

As opposed to the typical scenario presented above, the students in the STG in this study were introduced to several opportunities for out-of-class study on the computer and the Internet. On the whole, the data collected through interviews and observation revealed that the students were fairly satisfied with the digital opportunities that enabled them to improve their skills at home without the presence of the teacher. Nineteen of the 24 STG students expressed that the idea of sitting in the Self Access Center at the university after their classes had not been beneficial to them due to their fatigue and mental exhaustion. However, the language learning materials available on the Internet exposed the students in the STG to the target language within their home environment where they were comfortable, relaxed, and rested.

*The Difference between the STG and the NSTG with Regard to Language Learning Strategy*

The researchers gave the SILL to both the STG and the NSTG to ascertain the quantity of strategies in the questionnaire that the students had been applying prior to the implementation of the language learning strategy training through CALL. As it can be seen in the independent t-test results presented in Table 2, no significant difference was noted between the strategy types of the two groups with the exception of memory and cognitive strategies. These results indicate that the two groups were similar in terms of their language learning strategy use prior to the administration of the language learning strategy training to the STG.

**Table 2.**  
*Statistics Indicating Pre-Test (SILL) Results of the STG and the NSTG*

| <i>Group Statistics</i>  | <i>Groups</i> | <i>N</i> | <i>M</i> | <i>SD</i> | <i>Std. Error Mean</i> |
|--------------------------|---------------|----------|----------|-----------|------------------------|
| Memory Strategies        | Pre STG       | 24       | 1.7500   | .33131    | .06763                 |
|                          | Pre NSTG      | 24       | 2.2546   | .33169    | .06770                 |
| Cognitive Strategies     | Pre STG       | 24       | 2.0417   | .40893    | .08347                 |
|                          | Pre NSTG      | 24       | 2.6935   | .53472    | .10915                 |
| Compensation Strategies  | Pre STG       | 24       | 2.3194   | .49859    | .10177                 |
|                          | Pre NSTG      | 24       | 2.4583   | .41775    | .08527                 |
| Metacognitive Strategies | Pre STG       | 24       | 2.2778   | .49798    | .10165                 |
|                          | Pre NSTG      | 24       | 2.4722   | .37394    | .07633                 |
| Affective Strategies     | Pre STG       | 24       | 2.3056   | .50521    | .10312                 |
|                          | Pre NSTG      | 24       | 2.4722   | .37394    | .07633                 |
| Social Strategies        | Pre STG       | 24       | 2.2569   | .47645    | .09725                 |
|                          | Pre NSTG      | 24       | 2.5119   | .43355    | .08850                 |

In contrast, as shown in Table 3, there were significant disparities between the mean post-scores of the STG and the NSTG. While the post-scores of the STG ranged from 3.71 to 3.86, the post-scores of the NSTG ranged from 2.11 to 2.65. The mean scores of the STG suggest that the participants in this group reported a high use of language learning strategies. Based on the analyses of the post scores of the STG and the NSTG, there were significant mean differences between each strategy within the groups. The levels of significance for each group (0.000) were less than the p value (0.05), so we concluded that there was a significant difference between the STG and the NSTG in terms of their language learning strategy use.

**Table 3.**  
*Statistics Indicating Post-Test (SILL) Results of the STG and the NSTG*

| <i>Group Statistics</i>  | <i>Groups</i> | <i>N</i> | <i>M</i> | <i>SD</i> | <i>Std. Error Mean</i> |
|--------------------------|---------------|----------|----------|-----------|------------------------|
| Memory Strategies        | Post STG      | 24       | 3.7176   | .31594    | .06449                 |
|                          | Post NSTG     | 24       | 2.1157   | .28840    | .05887                 |
| Cognitive Strategies     | Post STG      | 24       | 3.8690   | .25596    | .05225                 |
|                          | Post NSTG     | 24       | 2.3899   | .26474    | .05404                 |
| Compensation Strategies  | Post STG      | 24       | 3.9722   | .30561    | .06238                 |
|                          | Post NSTG     | 24       | 2.4722   | .44141    | .09010                 |
| Metacognitive Strategies | Post STG      | 24       | 3.7824   | .18383    | .03752                 |
|                          | Post NSTG     | 24       | 2.3708   | .31551    | .06440                 |
| Affective Strategies     | Post STG      | 24       | 3.7778   | .26314    | .05371                 |
|                          | Post NSTG     | 24       | 2.6597   | .31653    | .06461                 |
| Social Strategies        | Post STG      | 24       | 3.8125   | .33446    | .06827                 |
|                          | Post NSTG     | 24       | 2.6111   | .26314    | .05371                 |

#### *Students' General Perceptions of English Language Learning through CALL*

The third research question was posed to reveal the feelings and ideas of the learners in the STG with regard to studying English with computers and the Internet. The analysis of the quantitative data indicated that students' feelings about web-based language learning were positive. Analysis of the interviews revealed that using computers and the Internet assisted the students with finding alternative ways to learn the English language. The principal problem for the students in the STG was their lack of knowledge of what to study and which ways to study. This lack was also supported by the results of the initial questionnaire, because the mean score of the answers given was below 2.5. Therefore, the students in the STG had been using language strategies infrequently prior to the strategy training. Moreover, the web-based instruction transformed the traditional classroom environment into an

environment that intensified the motivation of the learners. The students commented that before utilizing the digital technology for language learning, a lesson lasting 50 minutes seemed relatively long and that they struggled to stay motivated for the duration of the lesson. However, the students stated that using laptops and the Internet to perform some activities in the classroom helped them to maintain their concentration levels during the lesson.

### Conclusions and Recommendations

The analysis of data revealed that the use of computers and the Internet helped the STG students to improve their language learning strategies. Before the language learning strategy training through CALL, the students in the STG reported using very few learning strategies when learning English, mainly because they had not been taught or introduced to language learning strategies in previous English classes. This response parallels Grenfell and Harris' (1999) suggestions that learning strategy instruction be integrated into conventional lessons and that students be taught explicitly through collaborative learning. The results of this study indicate that explicit language learning strategy training paired with an interactive environment with computers and the Internet aided learners in developing their language learning strategies. Moreover, the learners in the STG improved in their use of language learning strategies, so we can also conclude that they increased their learning autonomy.

Motivation levels of students are an additional aspect associated with learner autonomy (Dickinson, 1987; Ushioda, 2000). This study demonstrated that, unlike the students in the NSTG, the students in the STG showed increasing motivation during and after strategy training, even though they knew that their participation in the strategy training would not be rewarded with a grade. Confirmed by the teacher-researcher's observations and the self-reports of the STG participants, the students had higher motivation during the training than they did prior to the training through CALL.

One of the most important issues that teachers can address while developing learners' autonomy is the learners' responsibility for their own learning (Wenden, 1991). As Po-Ying (2007) claims, learners do not readily accept personal responsibility for learning provided that they do not receive encouragement. The findings of this study corroborate these claims, because they revealed that the students in the STG were highly teacher-dependent before the strategy training; however, the STG students underwent a gradual change in their behaviour from teacher-dependent to teacher-independent during the language learning strategy training process.

One of the main goals of this study was to persuade the STG students to find their own learning methods. Thus, the researcher-instructor provided these students with various out-of-class activities that would encourage them to develop autonomy. Once they developed this autonomy, they were able to explore alternative methods of study and approaches for improving their English. The strategy training involved the use of computers and the Internet to provide the learners in the STG with activities and materials that they could employ outside the classroom. It was

observed that the assignments carried out on computers and the Internet were received with greater enthusiasm by the students than were the paper-based assignments. Using computers and the Internet had actively and personally involved the students in out-of-class studies, which led to autonomy development.

In conclusion, the results of this study indicate that the students in the STG improved in their language learning strategy use, had high motivation for learning, and were willing to take personal responsibility for their own learning outside the classroom with the help of CALL. All of these improvements assisted the learners with making progress towards becoming autonomous. Providing learners with the necessary strategies for language learning, teaching the strategies through CALL, helping learners to reach higher motivation levels, and encouraging students to take responsibility for their own learning by having them participate in out-of-class study contributed to the students' autonomy development in language learning.

As for this study's pedagogical implications, incorporating the teaching of learning strategies into the curriculum, implementing the instruction of these strategies through CALL, increasing student motivation levels, and encouraging students to take personal responsibility for learning and to participate in extra-curricular study with the aid of computers and the Internet will strengthen the English language teaching program. Additionally, organizing the frequency and the duration of the language learning strategy training in line with the workload of the students will encourage the students to commit to English language learning and to develop into autonomous learners.

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## Bilgisayar Destekli Dil Öğreniminin Öğrenci Özerkliğini Arttırmadaki Rolü

### Atif:

Mutlu, A., & Eröz-Tuğa, B. (2013). The role of computer-assisted language learning (CALL) in promoting learner autonomy. *Egitim Arastirmalari-Eurasian Journal of Educational Research*, 51, 107-122.

### (Özet)

#### Problem Durumu

Son yıllarda bilgisayarların ve internetin dil öğretimine etkin biçimde katkıda bulunup bulunmadığını araştıran çalışma sayısının gözle görülür biçimde artmasına sebep olan bilgisayar ve internet desteği kullanılarak verilen dil öğretimi bu alanda çalışan pek çok araştırmacının dikkatini çekmiştir. Bu çalışmaların pek çoğu öğrencilerin ve öğretmenlerin bilgisayar ve internete karşı olan inanç ve tutumlarını, ya da bilgisayarların ve internetin verilen eğitimin bir parçası olarak kullanımının öğrenci başarı seviyesinin veya öğrencilerin farklı kültürlerle ilgili farkındalığının artmasında doğrudan etkili olup olmadığına odaklanmışlardır. Özellikle son yıllarda bilgisayar ve internetin eğitim ortamlarında yoğun bir şekilde kullanılmaya başlamasına rağmen, bilgisayar destekli eğitimin ögrenen özerkliğini geliştirmedeki rolü üzerine yapılan araştırmalar nispeten kısıtlı sayıda kalmıştır. Yapılan bu çalışma, bilgisayar destekli eğitimin ögrenen özerkliğini arttırmadaki rolüne odaklanarak literatüre katkıda bulunacaktır.

#### Araştırmmanın Amacı

Bu çalışmanın temel amacı teknoloji ile donatılmış dil eğitimi ortamlarının ögrenen özerkliğini geliştirmek için nasıl kullanılabileceğini göstermek ve ögrenen özerkliğinin gelişmesinde etkin olan bazı faktörleri deneysel bir yaklaşımla sunmaktır. Bu çalışmada dil öğreniminde özerklik gelişimi dört farklı alandaki değişimlere odaklanarak gözlemlenecektir. Bunlar, öğrencilerin dil öğrenimleri sırasında sıkça kullandıkları dil öğrenme stratejileri; öğrencilerin İngilizce dili eğitimindeki motivasyon seviyeleri; öğrencilerin kendi öğrenimleri için sorumluluk alma durumları; ve öğrencilerin sınıf dışında ve dersler haricinde İngilizce çalışmaya ve öğrenme seviyelerini geliştirmeye olan hevesleridir.

#### Araştırmmanın Yöntemi

Bu çalışmaya Ankara'da özel bir üniversitenin Yabancı Diller Bölümü'nde öргün eğitim gören İngilizce seviyeleri orta düzey olarak belirlenmiş 48 Hazırlık Bölümü öğrencisi katılmıştır. Bu araştırmada görev alan öğrenciler Strateji Eğitimi Alan Grup (STG) ve Strateji Eğitimi Almayan Grup (NSTG) olarak iki gruba ayrılmışlardır. Strateji Eğitimi Alan Gruptaki öğrencilere beş hafta süreyle bilgisayar destekli dil öğrenme stratejileri eğitimi verilirken Strateji Eğitimi Almayan Gruptaki öğrenciler bu eğitimi almamış ve okulun normal dil eğitimi programını takip ederek derslerini yapmışlardır. Strateji Eğitimi Alan Grup'taki katılımcılar ile eğitim verilmeden hemen önce ve eğitim verildikten hemen sonra yüz yüze görüşmeler yapılmış ve bu gruptaki katılımcılardan kendi elektronik günlüklerini tutmaları istenmiştir. Her iki gruptaki öğrencilerin dil öğrenim strateji kullanımını incelemek için tüm katılımcılara bir ön-test ve bir son-test verilmiştir. Bunun yanı sıra, araştırma süresince her iki gruptaki katılımcıların motivasyon seviyeleri, kendi öğrenmelerinin

sorumluluğunu alma hevesleri ve sınıf dışı çalışmaya olan istekleri gözlemlenmiştir. Özetle, bu çalışmada beş haftalık bilgisayar destekli dil öğrenme stratejileri eğitimi, katılımcıların kendileri için hazırladıkları elektronik günlükler, sınıf içi gözlemler, yarı yapılandırılmış yüz yüze görüşmeler ve anket uygulaması yöntemleriyle hem nitel hem de nicel veri toplanmıştır.

Bu çalışma için toplanan veriyle aşağıda listelenen üç araştırma sorusuna cevap aranmıştır: (1) Bilgisayar destekli dil eğitimi, dil eğitiminde öğrenci özerliğini arttırmada ne kadar etkilidir? (1a) Bilgisayar destekli dil eğitimi sayesinde öğrenciler ne kadar dil öğrenme strateji kullanımlarını geliştirebilirler? (1b) Bilgisayar destekli dil eğitimi öğrenci motivasyonunu arttırmada ne kadar etkilidir? (1c) Bilgisayar destekli dil eğitiminde öğrenciler ne kadar kendi öğrenmelerinin sorumluluğunu alabilirler? (1d) Bilgisayar destekli dil eğitimi ortamında öğrenim gören öğrenciler sınıf içi çalışmaların yanı sıra sınıf dışı çalışmalarla ne kadar vakit ayıırlar? (2) Dil öğrenme stratejileri kullanımı açısından, bilgisayar destekli eğitim alan öğrenci grubu (STG) ve bilgisayar destekli eğitim almayan (NSTG) öğrenci grubu arasında önemli bir fark var mıdır? (3) Bilgisayar destekli eğitim öğrencilerin bilgisayar ve internet ile dil öğrenme anlayışlarını nasıl etkiledi?

#### *Araştırmayı Bulanımları*

Yapılan Çalışmanın sonuçlarına göre Strateji Eğitimi Almayan Öğrenci Grubunun (NSTG) aksine, Strateji Eğitimi Alan Öğrenci Grubu (STG) dil öğrenimi kullanımlarında önemli gelişme gösterdikleri gözlemlenmiştir. Bunun yanı sıra bu adı geçen grubun dil öğrenme motivasyonunda belirgin bir artış görülmüş ve kendi öğrenmelerinin sorumluluğunu alma hevesi ve sınıf dışı ders çalışma isteklerinin arttığı gözlenmiştir. Aynı zamanda, bu durumun onların özerk öğrenme yolunda ileri adım atmalarına yardımcı olduğu önerilmiştir.

#### *Araştırmayı Sonuçları ve Önerileri*

Öğrenen özerliği gelişimi ilk önce öğrencilerin bu duruma hazır olmalarını gerektirir. Bu yüzden, eğitimin uygulanacağı kurumlarındaki öğretmenlerin öğrencilerinin buna hazır olup olmadıklarını bilmeleri her şedyen önemlidir. Özerk öğrenmenin geleneksel dil öğreniminden bir farkı özerk öğrenmede öncelikli olarak öğrencilerin öğrenme süreciyle ilgili farkındalık geliştirmelerinin hedeflenmesidir. Bu yüzden, bu çalışmaya katılan okul gibi okulların program geliştirme birimlerinin eğitim hedeflerini ve amaçlarını yeniden gözden geçirmeleri ve sınıf aktivitelerini eğitim kurumu tarafından hedeflenen öğrenen özerliğini artırmaya yönelik olarak planlamaları gerekmektedir. Bilgisayar destekli dil eğitimi süreci boyunca teknolojik nedenlerle yaşanabilecek herhangi bir olumsuz tecrübeinin önüne geçmek için hem bu eğitim kurumunda görev alan öğretmenlerin hem de bu eğitim sürecinden geçecek olan öğrencilerin bazı temel bilgisayar kullanma becerilerine sahip olmalarını gerekmektedir. Bu sebeple, öğrenen özerliği hedefiyle bilgisayar destekli dil eğitimi verilmeden önce eğitim kurumundaki hem öğretmenlerin hem de öğrencilerin bilgisayar kullanım becerilerinin geliştirilmesi bu uygulamanın daha verimli olmasını sağlayacaktır ve aynı zamanda endişe daha yaşanmadan giderildiği için buna duyulan ilgiyi artıracaktır.

*Anahtar Sözcükler:* Bilgisayar Destekli Dil Eğitimi, öğrenen özerliği, öğrenme stratejileri, motivasyon, öğrenen sorumluluğu, sınıf dışı ders çalışma, dil öğrenimi.